

Appl. No. 10/788830

In the Claims:

Listing of all claims:

1-37. (Cancelled.)

1 38. (Currently Amended) A system for welding
2 comprising:
3 a welding power source having a welding power
4 output;
5 a wire feeder connected to the welding output and
6 having a speed control input; and
7 a controller having a speed control output
8 connected to the speed control input having a weld wire
9 speed set point, and a run-in wire speed set point, wherein
10 the run-in speed set point is a set percentage of the weld
11 wire speed set point, whereby a change in the weld wire
12 speed set point effects a like-change in the run-in wire
13 speed set point to maintain the set percentage.

1 39. (Original) The system of claim 38, wherein the
2 set percentage is a user selectable percentage.

1 40. (Original) The system of claim 39, wherein the
2 percentage is between 25 percent and 150 percent.

1 41. (Original) The system of claim 39, wherein the
2 system includes a weld wire feed user input, and wherein the
3 controller includes a run-in set circuit including a percent
4 input connected to the user input and an enable input.

1 42. (Original) The system of claim 41, wherein the
2 enable input receives a trigger state signal and a power-up
3 signal.

Appl. No. 10/788830

1 43. (Original) The system of claim 42 wherein the
2 user input is a potentiometer.

1 44. (Original) The system of claim 43, wherein the
2 enable input is connected to a user selectable toggle switch.

3 45. (Original) The system of claim 38 wherein the
4 controller is a microprocessor controller.

1 46. (Original) The system of claim 38 wherein the
2 controller is an analog controller.

1 47. (Currently Amended) A system for welding
2 comprising:
3 power means for supplying welding power to an arc;
4 feeder means for feeding wire to the arc; and
5 control means for controlling a speed of the
6 feeder means to a weld speed and a run-in speed, wherein the
7 run-in speed set point is a set percentage of the weld speed
8 set point whereby a change in the weld wire speed set point
9 effects a like-change in the run-in wire speed set point to
10 maintain the set percentage, connected to the feeder means.

1 48. (Original) The system of claim 47, further
2 comprising means for allowing the user to select the set
3 percentage, connected to the control means.

1 49. (Currently Amended) A method of welding
2 comprising:
3 providing welding power to an arc;
4 feeding wire to the arc;

Appl. No. 10/788830

controlling the speed of the wire during a run-in state; and

controlling the speed of the wire during a weld state, wherein the run-in speed set is a set percentage of the weld speed, whereby a change in the weld wire speed set point effects a like-change in the run-in wire speed set point to maintain the set percentage.

50. (Original) The method of claim 49, including using a user selectable percentage as the set percentage.

51. (Original) The method of claim 50, including using the set percentage from the range of between 25 percent and 150 percent.

52. (Original) The method of claim 51, including determining the user selected percentage speed in response to an enable signal and a weld wire feed user input.

53. (Withdrawn) A welding-type power supply, comprising:
a power source;
a controller, connected to the power source, and having at least one set point input, and at least one calibration input;
a user-selectable input connected to the at least one set point input, and further connected to the at least one calibration input.

54. (Withdrawn) The welding-type power supply of claim 53, further comprising an input-selection circuit, connected to the controller, wherein the controller enables one

Appl. No. 10/788830

4 of the calibration input and set point input, and disables the
5 other of the set point input and calibration input.

1 55. (Withdrawn) The welding-type power supply of
2 claim 54, further comprising a user-selectable switch connected
3 to the input-selection circuit.

1 56. (Withdrawn) The welding-type power supply of
2 claim 55, wherein the user selectable switch is a toggle switch.

1 57. (Withdrawn) The welding-type power supply of
2 claim 56, wherein the user-selectable input is a potentiometer on
3 a user control panel.

1 58. (Withdrawn) The welding-type power supply of
2 claim 54, wherein the controller is a microprocessor controller.

1 59. (Withdrawn) The welding-type power supply of
2 claim 58, wherein the microprocessor controller includes storage
3 of at least one user-selected calibration value received on the
4 calibration input.

1 60. (Withdrawn) The welding-type power supply of
2 claim 59, wherein the microprocessor controller includes storage
3 of at least two user-selected calibration values received on the
4 calibration input, and wherein the microprocessor includes a
5 scaling circuit that scales at least one of a command output or a
6 feedback output responsive to the at least two user-selected
7 calibration values.

1 61. (Withdrawn) The welding-type power supply of
2 claim 60, wherein the microprocessor controller includes a

Appl. No. 10/788830

3 digital output disposed to output the at least two user-selected
4 calibration values.

1 62. (Withdrawn) The welding-type power supply of
2 claim 55, further comprising a calibration pendant, on which the
3 toggle switch is mounted.

1 63. (Withdrawn) The welding-type power supply of
2 claim 53, wherein the calibration input is an output voltage
3 calibration input.

1 64. (Withdrawn) The welding-type power supply of
2 claim 53, further comprising:
3 a wire feeder connected to the controller; and
4 a second user selectable input; wherein
5 the controller includes a wire feed speed calibration
6 input and a wire feed speed set point input, both connected to
7 the second user-selectable input.

1 65. (Withdrawn) A welding-type power supply,
2 comprising:
3 power means for providing power;
4 input means for receiving user-selectable input;
5 and
6 control means, connected to the input means and
7 the power means, for controlling the power means, and for
8 selectively choosing one of a set point and a calibration
9 value as a value received from the input means.

1 66. (Withdrawn) The welding-type power supply of
2 claim 65, further comprising means for the user to selectively
3 choosing one of the set point and the calibration value as the
4 value received from the input means.

Appl. No. 10/788830

1 67. (Withdrawn) The welding-type power supply of
2 claim 65, including means for storing at least one user-selected
3 calibration value received on the calibration input.

1 68. (Withdrawn) A method of calibrating a
2 welding-type power supply, of the type having a user-
3 selectable set point input, comprising:
4 detecting whether or not the power supply is in a
5 calibration mode;
6 receiving a value from the user-selectable set
7 point input as a calibration value if the power supply is in
8 the calibration mode; and
9 receiving a value from the user-selectable set
10 point input as a set point value if the power supply is not
11 in the calibration mode.

12 69. (Withdrawn) The method of claim 68, further
13 comprising receiving a user-selection indicating if the power
14 supply is in the calibration mode.

1 70. (Withdrawn) The method of claim 68, further
2 comprising storing the calibration value.